

## **REMARKS**

The Action indicated that claims 6-9 and 12-13 were pending at the issuance of the instant Office Action. The rejections set forth in the Office Action are overcome in part by amendment and traversed in part by Applicants' argument set forth below.

### **1. Amendment to the specification**

Pursuant to 35 U.S.C. §119(e)(1), Applicants have amended the specification to include a claim of priority to U. S. Provisional Patent Application No. 60/144,797, filed on July 21, 1999. Applicants respectfully request that this paper be considered a petition in accordance with 37 C.F.R. §1.78(a)(6), and any fees associated therewith be charged to Deposit Account No. 13-2490. Applicants contend that the entire delay between the date the claim was due under 37 C.F.R. §1.78(a)(5)(ii) and the date the claim was filed was unintentional.

### **2. Drawings**

The Action asserted that the amendments filed April 24, 2003 introduced new matter into the disclosure. Applicants respectfully point out that support for the amendments can be found in the specification at page 79, line 26 to page 80, line 5; and in Figures 2 and 3 of U.S. Provisional Application No. 60/144,797, filed July 21, 1999, from which the instant application claims the benefit of priority and which is incorporated by reference into the instant application. The application has been amended to perfect the claim of priority as pointed out in the "Amendment to the Specification" provided above. Thus, no new matter has been introduced as a result of these amendments.

### **3. Rejection of claims 6-9 and 12-13 under 35 U.S.C. § 112, first paragraph**

Claims 6-9 and 12-13 stand rejected under 35 U.S.C. §112, first paragraph as allegedly containing subject matter that was not described in the specification such that

one of skill in the art would recognize that Applicants possessed the claimed invention at the time of filing. Specifically, the Action asserts that only specific fusion polypeptides are contemplated within the specification. Applicants respectfully traverse.

Applicants submit that one of skill in the art will recognize that a fusion polypeptide comprises two different proteins or portions of two different proteins fused together, either directly or via a linker or adapter sequence. See for example, page 250 from the Oxford Dictionary of Biochemistry and Molecular Biology, copy attached, which states that the term “fusion” is “(in molecular biology) the act, process, or result of artificially linking genes that code for two different proteins, with the aim of generating a **fusion protein**” (OXFORD DICTIONARY OF BIOCHEMISTRY AND MOLECULAR BIOLOGY, Revised Edition 2000, A.D. Smith, Ed., Oxford University Press, Oxford). The specification defines fusion polypeptide in a manner that is consistent with this ordinary and usual meaning. For example, Applicants define VGF fusion polypeptides in the specification of the instant application at page 9, lines 11-13 as follows:

The term “VGF fusion polypeptide” refers to a fusion of one or more amino acids (such as a heterologous peptide or polypeptide) at the amino or carboxyl-terminus of a VGF polypeptide, fragment, ortholog, variant, or derivative.

Thus, in keeping with the ordinary and usual meaning of fusion polypeptide, a VGF fusion polypeptide as claimed in amended Claim 6 is a VGF polypeptide (*i.e.* SEQ ID NO: 7) fused to an amino acid sequence from a different protein (*i.e.* a non-VGF protein).

The Action points out that the specification teaches certain specific fusion polypeptides, for example, at page 81 and on pages 39-40. Applicants submit that the invention is not limited to these fusion polypeptides. Actually, the specification provides several *non-limiting examples* of non-VGF proteins that can be fused to SEQ ID NO: 7, including “an epitope to allow for the detection and/or isolation of a VGF fusion polypeptide; a transmembrane receptor protein or a portion thereof, such as an extracellular domain or a transmembrane and intracellular domain; a ligand or a portion thereof which binds to a transmembrane receptor protein; an enzyme or

portion thereof which is catalytically active; a polypeptide or peptide which promotes oligomerization, such as a leucine zipper domain; a polypeptide or peptide which increases stability, such as an immunoglobulin constant region; and a polypeptide which has a therapeutic activity different from the VGF polypeptides of the present invention” (see page 19, line 28 to page 20, line 7). Therefore, contrary to the assertions of the Action, the specification contemplates and explicitly recites a multitude of possible VGF fusion polypeptides.

Thus, Applicants respectfully contend that the specification, at the time of filing, provided sufficient disclosure to reasonably convey to one of skill in the art that the inventors were in possession of fusion polypeptides comprising the amino acid sequence of SEQ ID NO: 7. Consequently, reconsideration and withdrawal of this ground of rejection is respectfully requested.

#### **4. Rejection of claims 6-9 and 12-13 under 35 U.S.C. § 112, first paragraph**

Claims 6-9 and 12-13 stand rejected under 35 U.S.C. §112, first paragraph as allegedly containing subject matter that was not described in the specification such that one of skill in the art would recognize that Applicants possessed the claimed invention at the time of filing. Specifically, the Action asserts that the specification does not describe amino acid sequences that are “derived from a non-VGF gene.” Applicants respectfully traverse.

As claimed in amended Claim 6, the fusion polypeptides of the invention comprise an amino acid sequence from a non-VGF protein and the amino acid sequence of SEQ ID NO: 7. The specification provides several examples of non-VGF proteins that can be fused, directly or via a linker or adapter sequence, to SEQ ID NO: 7 (see page 19, line 28 to page 20, line 7 in the specification and quoted above).

Thus, Applicants respectfully contend that the specification, at the time of filing, provided sufficient disclosure to reasonably convey to one of skill in the art that the inventors were in possession of fusion polypeptides comprising the amino acid sequence of SEQ ID NO: 7. Consequently, reconsideration and withdrawal of this ground of rejection is respectfully requested.

**5. Rejection of claims 6-9 and 12-13 under 35 U.S.C. §112, second paragraph**

Claims 6-9 and 12-13 stand rejected under 35 U.S.C. §112, second paragraph as allegedly being indefinite. Specifically, the Action asserts that the phrase “a non-VGF gene fused to the amino acid sequence of SEQ ID NO: 7” is confusing. Applicants have amended claim 6 from which dependent claims 7-9 and 12-13 depend, and as amended these claims do not recite the objected-to language. Applicants contend that the amendments to the claims have been made in order to expedite prosecution of the pending claims to allowance, and in Applicants' view the amendments will have no substantive effect on the proper scope of the pending claims. Consequently, Applicants respectfully submit that the amended claims are not indefinite, and request reconsideration of these claims and withdrawal of this ground of rejection.

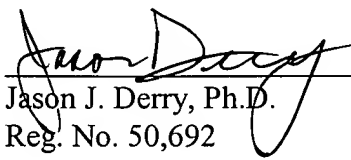
**CONCLUSION**

Applicants respectfully contend that all conditions of patentability are met in the pending claims as amended. Allowance of the claims is thereby respectfully solicited.

If Examiner Hayes believes it to be helpful, he is invited to contact the undersigned representative by telephone at (312) 913-0001.

Respectfully submitted,  
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